Effect of alpha-lipoic acid at the combination with mefenamic acid in girls with primarydysmenorrhea: randomized, double-blind, placebo-controlled clinical trial.

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Abstract

Primary dysmenorrhea is a common gynecologic disorder and is one of the main causes for referral to the gynecology clinic. This study aimed to determine the effects of alpha-lipoic acid (ALA) and mefenamic acid and a combination compared with placebo on the girls with primary dysmenorrhea. This double-blind, placebo-controlled clinical trial done on population consisted of female students living in dormitories of Qazvin University of Medical Sciences who had moderate to severe dysmenorrhea using the Visual Analog Scale (VAS) questionnaire. Participants were randomly divided into four groups (*n* = 100): ALA, mefenamic acid, ALA + mefenamic acid and placebo groups. ALA and mefenamic acid were administrated in 600 mg and 250 mg, respectively. The severity of the pain was measured in the beginning and the end of the study. Statistical analysis was performed using SPSS software (SPSS Inc., Chicago, IL). Our final results suggested that, although mefenamic acid significantly decreased the menstrual pain, ALA supplementation, 600 mg, would be more efficient than mefenamic acid in 250 mg. Also, the combination of ALA and mefenamic acid significantly has been far. Considering the ALA supplementation effect on pain relief in patients with primary dysmenorrhea, this antioxidant can be recommended for the healing of symptoms of these patients.

KEYWORDS:

Primary dysmenorrhea; alpha-lipoic acid; mefenamic acid; menstrual pain

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